REMARKS

The Examiner is thanked for the courtesies extended during the course of the interview held with Applicants on June 25, 2002. As a result of the discussion, as well as the amendments made herein, the case is now thought to be allowable.

Claims 1-25 were rejected under 35 USC 112, second paragraph. These rejections are traversed based upon the specific claim amendments presented herein.

Specifically, according to the Office Action, claims 1 and 8 were unclear with respect to the terms "preferred" in the preamble. Claims 1 and 8 have been amended so that the claims now read on a method of assaying the wash performance of an assay and the term "preferred" has been deleted from the claims. Accordingly, the claims are thought to overcome the rejections and reconsideration and withdrawal of the rejections are respectfully requested.

According to the Office Action, claim 1 is unclear because there is no step directed to the specific assay of the enzyme. In response, Applicants have deleted the "assay" subject matter from claim 2, and incorporated the subject matter into claim 1. Based upon the amendment(s) to claim 1, reconsideration and withdrawal of the rejection(s) are respectfully requested.

According to the Office Action, claim 3 is unclear with regard to the preamble and with respect to the specific method by which the detergent composition is assayed. As was discussed during the interview, the rejections should apply to claim 8. In response, Applicants have deleted the "assay" subject matter from claim 9, and incorporated the subject matter into claim 8. Based upon the amendment(s) to claim 8, reconsideration and withdrawal of the rejection(s) are respectfully requested.

According to the Office Action, claim 15 is unclear with regard to the specific method by which the catalytic efficiency of the enzyme is determined. This rejection is traversed based upon amended claim 15. Specifically, the claim has been amended in accordance with the suggestion by the Examiner in the Office Action. Accordingly, reconsideration and withdrawal of the rejections are respectfully requested.

The present invention is directed to a method of assaying the wash performance of an enzyme. Claims 1 and 8 recite providing a swatch of material comprising a piece of material and a stain, applying an enzyme to the swatch, incubating the swatch and the enzyme and measuring the degree of removal of enzyme from the stain.

The claims also recite fixing the stain to the material (*see, e.g.,* amended independent claims 1, 8 and 15). According to the specification, a stain can be fixed to the material in a number of ways (*see*, e.g., *inter alia*, page 4, lines 3-12), including increasing or decreasing the incubation time, varying the temperature at which the incubation takes place and/or varying the concentration of the chemical.

The amended claims also provide recite that the swatch of material may be a smaller swatch. (*see* amended claims 2 and 9 and new claim 26).

Claims 1-20 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 5,454,971 issued to Sakai et al. This rejection is traversed.

According to the Office Action, Sakai et al teaches a method for determining washing efficiency and the effect of lipase addition on washing, cloth stained with dirt, lipases and proteases added to the detergent and determination of the washing efficiency.

Sakai et al does not teach or suggest fixing a stain to a material. Likewise, Sakai et al does not teach or suggest using a smaller swatch.

Claims 1-20 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 3,653,828 issued to Benjamin et al. This rejection is traversed.

According to the Office Action, Benjamin et al disclose examples in which stain removing properties of a lipase-containing detergent are determined, a swatch stained using a staining solution comprising gravy, spinach, milk substitute and licorice, a lipase added to the washing machine, measuring whiteness levels and determining the ink stain properties by visual comparison.

Benjamin et al do not teach or suggest fixing a stain to a material. Likewise, Benjamin et al do not teach or suggest using a smaller swatch.

Claims 1-4, 6-10, 12-17, 19-20 and 24 were rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 4,797,362 issued to Takeuchi et al.

This rejection is traversed. According to the Office Action, Takeuchi et al disclose a method for determining the detergency of the protease enzymes. Takeuchi et al disclose that detergency was determined by incubating stained cloths with a detergent solution comprising enzymes; that the cloths are washed at 120 rpm and that the index of detergency was determined from the absorbance and reflectance of cloth before and after washing.

Takeuchi et al do not teach or suggest fixing a stain to a material. Likewise, Takeuchi et al do not teach or suggest using a smaller swatch.

Claims 1-22 were rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 5,453,372 issued to Vetter et al.

This rejection is traversed. According to the Office Action, Vetter et al disclose a method for determining the washing performance of proteases; Vetter et al disclose that proteases are added to detergent; Vetter et al disclose that the test fabric is stained, and that the test fabric was washed with protease containing detergent; Vetter et al disclose the washing efficiency of the proteases was determined by measuring the reflectance of the washed test fabric.

Vetter et al do not teach or suggest fixing a stain to a material. Likewise, Vetter et al do not teach or suggest using a smaller swatch.

The Office Action has not presented a *prima facie* case of anticipation in any of the above-cited cases. A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently, in a single prior art reference. (*see* MPEP 2131 and Verdegaal Bros. V. Union Oil Co. of California, 814 F2d 628, 631 (Fed.Cir. 1987)). Independent claims 1, 8 and 15 each recite "fixing" a stain to a material. None of the references cited in the Office Action teach fixing a stain to a material. Accordingly, the Office Action has not established a *prima facie* case of anticipation with respect to independent claims 1, 8 and 15 and claims dependent thereon. Reconsideration and withdrawal of the rejections are therefore proper and respectfully requested.

Amended dependent claims 2, 9 and 29 recite that the swatch is a smaller swatch. None of the above references teach a smaller swatch. Accordingly, reconsideration and withdrawal of the rejections are proper and respectfully requested.

Claim 25 was rejected under 103(a) as being unpatentable over Benjamin et al in view of U.S. Patent 4,028,263 issued to Gray. This rejection is respectfully traversed.

Benjamin et al was cited for the reasons presented above. However, according to the Office Action, Benjamin et al do not disclose measuring the fluorescence, but Gray et al disclose washing coffee-tea stained swatches with detergent followed by a determination of fluorescence in order to measure brightness.

Gray et al do not teach or suggest fixing a stain to a material. Likewise, Gray et al do not teach or suggest using a smaller swatch.

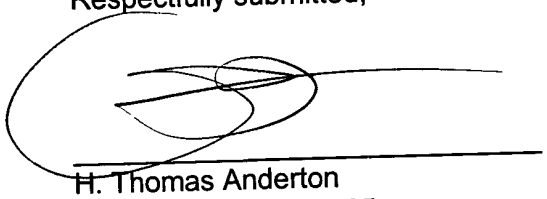
Benjamin et al in view of Gray et al do not establish a prima facie case of obviousness. To establish a *prima facie* case of obviousness, the references must teach or suggest all

claimed limitations (*see* MPEP 2143.03, etc). Claims 1, 8 and 15 recite fixing a stain to a material. Neither Benjamin et al or Gray et al, alone or in combination, teach or suggest fixing a stain to a material. Accordingly, the Office Action does not establish a *prima facie* case of obviousness, and reconsideration and withdrawal of the rejections are therefore proper and respectfully requested.

Likewise, dependent claims 2, 9 and 29 recite a smaller swatch. Neither Benjamin et al nor Gray et al, alone or in combination, teach or suggest a smaller swatch. Accordingly, reconsideration and withdrawal of the rejections for dependent claims 2, 9 and 29 based upon the reasons presented herein are respectfully requested.

An action on the merits and a Notice of Allowance are therefore respectfully requested.

Respectfully submitted,



Date: October 4, 2002

H. Thomas Anderton
Registration No. 40,895

Genencor International, Inc.
925 Page Mill Road
Palo Alto, CA 94304
Tel: 650-846-7544
Fax: 650-845-6504

APPENDIX A

A1

26. (NEW) The method of claim 15, wherein said swatch is a smaller swatch.

APPENDIX B

1. (AMENDED) A method of assaying [for a preferred] the wash performance of an enzyme comprising:

a) providing a swatch of material comprising a piece of material and a stain;
b) fixing the stain to the material;
c) applying an enzyme to the swatch; and
d) incubating the swatch and enzyme.

2. (AMENDED) The method of claim 1, [further comprising measuring the degree of removal of the stain from the material.] wherein said swatch is a smaller swatch.

8. (AMENDED) A method of assaying [for a preferred] the wash performance of a detergent composition comprising:

a) providing a swatch of material comprising a piece of material and a stain;
b) fixing the stain to the material;
c) applying a detergent composition to the swatch; [and]
d) incubating the swatch and detergent composition; and
e) measuring the degree of removal of the stain from the material.

9. (AMENDED) The method of claim 8, [further comprising measuring the degree of removal of the stain from the material.] wherein said swatch is a smaller swatch.

15. (AMENDED) A method of determining the catalytic efficiency of an enzyme comprising:

a) providing a swatch of material comprising a piece of material and a stain;
b) fixing the stain to the material;
c) [b)] applying the enzyme to the swatch;
d) [b)] incubating the swatch and enzyme;
e) [d)] removing the swatch or supernatant; and
f) [e)] measuring a [constituent of the stain.] catalytic efficiency of the enzyme.

Please add the following new claim:

26. (NEW) The method of claim 15, wherein said swatch is a smaller swatch.

APPENDIX C

1. (AMENDED) A method of assaying the wash performance of an enzyme comprising:
   a) providing a swatch of material comprising a piece of material and a stain;
   b) fixing the stain to the material;
   c) applying an enzyme to the swatch;
   d) incubating the swatch and enzyme;
   e) measuring the degree of removal of the stain from the material.

2. (AMENDED) The method of claim 1, wherein said swatch is a smaller swatch.

3. The method of claim 1, wherein the enzyme is selected from the group consisting of a protease, a cellulase, an amylase, a laccase, and a lipase.

4. The method of claim 1, wherein the material is selected from the group consisting of a fabric, plastic, glass or ceramic.

5. The method of claim 1, wherein the stain is selected from the group consisting of blood, milk, ink, grass, spinach, gravy, chocolate, egg, cheese, clay, pigment, oil, and combinations thereof.

6. The method of claim 1, wherein the enzyme is applied to the swatch in combination with a detergent ingredient.

7. The method of claim 1, further comprising agitating the swatch and enzyme during incubation.

8. (AMENDED) A method of assaying the wash performance of a detergent composition comprising:
   a) providing a swatch of material comprising a piece of material and a stain;
   b) fixing the stain to the material;
   c) applying a detergent composition to the swatch;
   d) incubating the swatch and detergent composition; and

A3 concld

e) measuring the degree of removal of the stain from the material.

9. (AMENDED) The method of claim 8, wherein said swatch is a smaller swatch.

10. The method of claim 8, wherein the material is selected from the group consisting of a fabric, plastic, glass, or ceramic.

11. The method of claim 8, wherein the stain is selected from the group consisting of blood, milk, ink, grass, spinach, gravy, chocolate, egg, cheese, clay, pigment, oil, and combinations thereof.

12. The method of claim 8, wherein the detergent composition is applied to the swatch in combination with an enzyme.

13. The method of claim 12, wherein the enzyme is selected from the group consisting of a protease, a cellulase, an amylase, a laccase, and a lipase.

14. The method of claim 8, further comprising agitating the swatch and detergent composition during incubation.

A4

15. (AMENDED) A method of determining the catalytic efficiency of an enzyme comprising:
a) providing a swatch of material comprising a piece of material and a stain;
b) fixing the stain to the material;
c) applying the enzyme to the swatch;
d) incubating the swatch and enzyme;
e) removing the swatch or supernatant; and
f) measuring a catalytic efficiency of the enzyme.

16. The method of claim 15, wherein the enzyme is selected from the group consisting of a protease, a cellulase, an amylase, a laccase, and a lipase.

17. The method of claim 15, wherein the material is selected from the group consisting of a fabric, plastic or ceramic.

18. The method of claim 15, wherein the stain is selected from the group consisting of blood, milk, ink, grass, gravy, chocolate, egg, cheese, clay, pigment, oil, and combinations thereof.

19. The method of claim 15, wherein the enzyme is applied to the swatch in combination with a detergent ingredient.

20. The method of claim 15, further comprising agitating the swatch and enzyme during incubation.

21. The method of claim 15, wherein the constituent is ink from a BMI stain.

22. The method of claim 15, wherein the constituent is labeled blood from a BMI stain.

23. The method of claim 15, wherein the constituent is in the supernatant.

24. The method of claim 15, wherein the constituent is measured by absorbance of the constituent.

25. The method of claim 15, wherein the constituent is measured by the fluorescence of the constituent.

26. (NEW) The method of claim 15, wherein said swatch is a smaller swatch.